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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Michael F. Stumborg et al.

Serial No.: 09/137,084

Group Art Unit: 2811

Filed: August 20, 1998

Examiner: Not yet assigned

For: ELECTRONIC DEVICES WITH BARIUM FILM AND PROCESS FOR MAKING SAME

Docket No.: 79329

AMENDMENT TRANSMITTAL LETTER (Large Entity)

TO THE ASSISTANT COMMISSIONER FOR PATENTS:

Transmitted herewith is an amendment in the above-identified application.

The fee has been calculated and is transmitted as shown below.

CLAIMS AS AMENDED

	CLAIMS REMAINING AFTER AMEND.	HIGHEST NO. PREV. PAID FOR	NUMBER EXTRA CLAIMS PRESENT	RATE	ADDITIONAL FEE
TOTAL CLAIMS	23	20 =	3 x	\$18.00	\$54.00
INDEP. CLAIMS	6	4 =	2 x	\$78.00	\$156.00
Multiple Dependent Claims (check if applicable) [ ]					\$0.00
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					\$210.00

[ ] No additional fee is required for amendment.  
[ X ] Please charge Deposit Account No. 08-0814 in the amount of \$210.00. (A duplicate copy of this sheet is enclosed.)  
[ ] A check in the amount of <sup>04</sup> to cover the filing fee is enclosed.  
[ ] The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 08-0814. (A duplicate copy of this sheet is enclosed.)  
[ ] Any additional fees required under 37 C.F.R. 1.16.  
[ ] Any patent application processing fees under 37 C.F.R. 1.17.

Dated: July 7, 1999

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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J. Young

In re application of: )  
Michael F. STUMBORG, et al. )  
Serial No.: 09/137,084 ) Group Art Unit: 2811  
Filed: August 20, 1998 ) Examiner: not yet assigned  
For: ELECTRONIC DEVICES WITH )  
      BARIUM BARRIER FILM AND )  
      PROCESS FOR MAKING SAME )

## PRELIMINARY AMENDMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Siri:

Prior to examination, kindly amend the above-identified application as follows:

IN THE CLAIMS:

2. (Amended) A semiconductor device comprising:  
a substrate material having a surface;  
a barrier film on said substrate surface, said barrier film  
having a [monolayer of] layer comprising elemental barium atoms  
attached to said surface;  
a conductor on said barrier film, said conductor having a  
tendency to diffuse into said substrate material if in direct  
contact therewith; and wherein said [monolayer] layer comprising  
elemental barium atoms serves as a barrier, inhibiting diffusion  
of the conductor into the substrate material.

Please add the following new claims:

-- 21. A semiconductor device according to claim 1, wherein said barrier film comprise a plurality of contiguous monolayers.

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02 FC<sub>1</sub>103 54.00 CH